

WHAT IS CLAIMED IS:

1. A network system for remotely controlling objects to be controlled, such as electric appliances, comprising:

a video camera of which a field of view or a controlable range within the field is set to include said objects to be controlled and which detects only light of a particular wavelength region;

a remote controller for generating electromagnetic waves toward a given position within said field of view or within said controlable range to form a light pointer of said particular wavelength range at said position irradiated with said electromagnetic waves, and capable of remote controlling; and

a control unit that processes an output signal from said video camera to detect any one or ones, indicated by said pointer, of said objects to be controlled, receives from said remote controller an operation signal associated with the remote controlling on said indicated object, and supplies a control signal according to said operation signal through a network to said object indicated by said pointer, so that said object indicated by said pointer can be remotely controlled by said remote controller.

2. A network system according to claim 1, wherein

for each of said electric appliances, an apparatus recognition range is set to define the range

of said appliance within said field of view of said video camera, and

said control unit, when one of said apparatus recognition ranges is selected by said pointer, detects said appliance associated with said apparatus recognition range indicated by said pointer, and supplies said control signal to said detected appliance.

3. A network system according to claim 2, wherein

said appliance is a lamp, and

said control unit controls said lamp to be switched on and off each time said lamp is designated by said pointer, and controls said lamp to increase or decrease its brightness by moving said pointer within said apparatus recognition range of said lamp made in the on-state.

4. A network system according to claim 2, wherein

said electric appliance is an air conditioner,

a projector is additionally provided to project an image on a region other than said apparatus recognition ranges that are included within said field of view or said controllable range,

said control unit controls said air conditioner to be switched on and off each time said air conditioner is designated by said pointer, and

said control unit controls said projector, by

designating said air conditioner by said pointer and by proper operations on said remote controller, to display an operation panel for said air conditioner within said field of view or within said controllable range so that said air conditioner can be remotely controlled on said operation panel.

5. A network system according to claim 2,
wherein

said electric appliance is a television set,
a projector is additionally provided to project an image on a region other than said apparatus recognition ranges within said field of view or said controllable range,

said control unit controls said television set to be switched on and off each time said television set is designated by said pointer, and

said control unit controls said projector, by use of said pointer to indicate said television set and by use of said remote controller to make a certain remote controlling operation, so that an operation panel for said television set can be displayed on a region within said field of view or said controllable range and that said television set can be remotely controlled on said operation panel.

6. A network system according to claim 1,
wherein

said electric appliances are a television set and a refrigerator,

said control unit registers said refrigerator to be in a designated state by specifying said refrigerator by said pointer, and

under the condition that the specification of said refrigerator is registered, said control unit controls said television set, by use of said pointer to designate said television set, and by use of said remote controller to make a certain remote controlling operation, so that the state in which foods are placed in said refrigerator can be displayed on said television set.

7. A network system according to claim 1, wherein

said electric appliances are a television set, a refrigerator and an electronic oven,

said control unit registers said refrigerator and said electronic oven to be in a registered state by use of said pointer to designate said refrigerator and said electronic oven, and

under the condition that the designation of said refrigerator and said electronic oven is registered, said control unit controls said television set, by use of pointer to designate said television set and by use of said remote controller to make a certain remote controlling operation, so that information of possible recipes using foods placed in said refrigerator is displayed on said television set.

8. A network system according to claim 1,

wherein

said electric appliances are a television set, a refrigerator and an electronic oven,

said control unit registers said refrigerator and said electronic oven to be in a designated state by designating said refrigerator and said electronic oven by use of pointer to designate said refrigerator and said electronic oven,

under the condition that said refrigerator and said electronic oven are designated, said control unit controls said television set, by use of pointer to designate said television set and by use of said remote controller to make a certain remote controlling operation, so that the state in which foods are placed in said refrigerator is displayed on said television set, and

under the condition that the state in which foods are placed in said refrigerator is displayed on said television set, said control unit controls said television set by registering said electronic oven, so that information of possible recipes using foods placed in said refrigerator can be displayed on said television set.

9. A network system according to claim 2, wherein

a projector is additionally provided to project an image on a region other than said apparatus recognition ranges within said field of view or said

controlable range, and

by depicting a frame by said pointer on a region other than said apparatus recognition ranges within said field of view or said controlable range, said control unit detects the position of said frame from the output of said video camera, and controls said projector to project and display an image within said frame.

10. A network system according to claim 2, wherein

said electric appliances are a television set and a refrigerator,

said control unit registers said refrigerator to be in a designated state by specifying said refrigerator by said pointer, and

under the condition that the specification of said refrigerator is registered, said control unit controls said television set, by use of said pointer to designate said television set, and by use of said remote controller to make a certain remote controlling operation, so that the state in which foods are placed in said refrigerator can be displayed on said television set.

11. A network system according to claim 2, wherein

said electric appliances are a television set, a refrigerator and an electronic oven,

said control unit registers said refrigerator

and said electronic oven to be in a registered state by use of said pointer to designate said refrigerator and said electronic oven, and

under the condition that the designation of said refrigerator and said electronic oven is registered, said control unit controls said television set, by use of pointer to designate said television set and by use of said remote controller to make a certain remote controlling operation, so that information of possible recipes using foods placed in said refrigerator is displayed on said television set.

12. A network system according to claim 2, wherein

said electric appliances are a television set, a refrigerator and an electronic oven,

said control unit registers said refrigerator and said electronic oven to be in a designated state by designating said refrigerator and said electronic oven by use of pointer to designate said refrigerator and said electronic oven,

under the condition that said refrigerator and said electronic oven are designated, said control unit controls said television set, by use of pointer to designate said television set and by use of said remote controller to make a certain remote controlling operation, so that the state in which foods are placed in said refrigerator is displayed on said television set, and

under the condition that the state in which foods are placed in said refrigerator is displayed on said television set, said control unit controls said television set by registering said electronic oven, so that information of possible recipes using foods placed in said refrigerator can be displayed on said television set.